

**T. Born 2 - 1****Claims:**

1. A method of generating compiled code for producing messages in conformance with an ASN (Abstract Syntax Notation) Standard, comprising the steps of:

using a syntax analysis process, compiling an ASN input file describing the rules of said ASN Standard into an ASN Data Repository comprising a data structure of said ASN input file;

using a general script input file, comprising program statements of rules for creating any information required about entries in said ASN Data Repository, to interpret contents of said ASN Data Repository to create an output file;

using an Application Programmer input file describing requirements for messages for a particular application, and said output file as inputs to a CASE tool to generate outputs for use by a Compiler for a particular processor.

2. The method of Claim 1, further comprising the step of:

compiling code for said particular processor using said output of said CASE tool in said Compiler for said particular processor.

3. The method of Claim 1, wherein the step of compiling said ASN Data Deposi-

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tory, comprises the steps of:

generating said ASN input file through a lexical analysis of ASN source statements to generate a file of ASN lexemes; and

using a syntax analyzer to compile said ASN lexemes into said ASN Data Depository.

4. The method of Claim 1, wherein the step of creating said output file comprises the steps of:

generating a file of general script lexemes using a lexical analysis of a general script source containing the rules for creating information in said ASN Data Depository; and

using a syntax analyzer, analyzing said general script lexemes to create a file of general script precompiled functions; and

using a general script Executor to act upon entries in said ASN Data Depository with said general script precompiled functions to produce said output file.

5. Apparatus for compiling code for producing messages in conformance with an ASN (Abstract System Notation) Standard, comprising:

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a data processing system, operative under program control for executing the following steps:

using a syntax analysis process, compiling an ASN input file, describing the rules of said ASN Standard into an ASN Data Repository comprising a data structure of said ASN input file;

using a general script input file, comprising program statements of rules for creating any information required about entries in said ASN Data Repository, to interpret contents of said ASN Data Repository to create an output file;

using an Application Programmer input file describing requirements for messages for a particular application, and said output file as inputs to a CASE tool to generate outputs for use by a Compiler for a particular processor.

6. The apparatus of Claim 5, wherein said data processing system is further operative under program control to execute the step of:

compiling code for said particular processor using said output of said CASE tool in said Compiler for said particular processor.

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7. The apparatus of Claim 5, wherein said data processing system is further operative under program control for executing the steps of compiling said ASN Data Depository by executing the steps of:

generating said ASN input file through a lexical analysis of ASN source statements to generate a file of ASN lexemes; and

using a syntax analyzer to compile said ASN lexemes into said ASN Data Depository.

8. The apparatus of Claim 5, wherein said data processing system is further operative under program control for executing the step of creating said output file by executing the steps of:

generating a file of general script lexemes using a lexical analysis of a general script source containing the rules for creating information in said ASN Data Depository; and

using a syntax analyzer, analyzing said general script lexemes to create a file of general script precompiled functions; and

using a general script Executor to act upon entries in said ASN Data Depository with said general script precompiled functions to produce said output file.